

Weekly Influenza Surveillance Report

Maryland Department of Health and Mental Hygiene | Infectious Disease and Environmental Health Administration
Office of Infectious Disease Epidemiology and Outbreak Response

SYNOPSIS

During the first full week of 2011, influenza activity continued to increase in Maryland. Two outbreaks of influenza, one outbreak of ILI, and three outbreaks of pneumonia were reported. The number of rapid influenza tests, and the proportion of those that were positive, increased according to collaborating clinical laboratories. The State Laboratories Administration reported an increase in the number of tests performed at the State Laboratory, with 52 samples testing positive for influenza by PCR. Reports from sentinel providers and Maryland residents also indicate increased activity. Based on these reports, influenza activity in Maryland has been classified as **"WIDESPREAD"** for the first week of 2011, meaning that there were confirmed influenza cases and outbreaks in three or more regions in Maryland.

If you have not done so already, please consider receiving the influenza vaccine. There is plenty of vaccine available in Maryland, and you can find information on where and how to get it at: <http://tinyurl.com/4j4t8hf>

INFLUENZA-LIKE ILLNESS SURVEILLANCE (ILINet)

During week 1, 13 sentinel providers reported 172 (3.7%) of 4,683 visits to their practices were for ILI. This is below the state baseline of 5.6%.

This same week last season, when influenza activity peaked late in October of 2009 and was on the decline by December, the proportion of visits for ILI was 2.8%.

For more information on the US Outpatient Influenza-like Illness Reporting Network (ILINet), please visit our website: <http://dhmh.maryland.gov/fluwatch> and click on "ILINet Sentinel Providers".

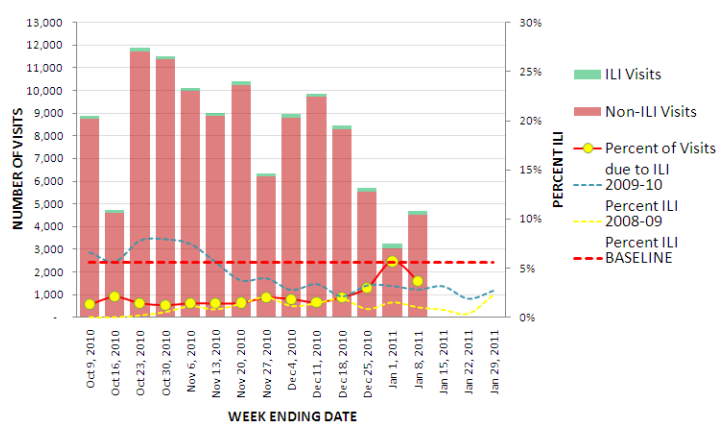


Figure 1. Number of visits and proportion of visits for ILI to ILINet sentinel providers, 2010-11 influenza season

CLINICAL LAB REPORTS OF RAPID FLU TESTING

During week 1, 19 clinical laboratories reported 196 (14.5%) of 1,349 rapid influenza tests as positive. One hundred sixty-six (166) were positive for type A, and 16 were positive for type B influenza. This proportion of positive tests was higher than the proportion reported at this time last season, which was 2.3%.

While not as accurate as PCR tests, rapid influenza tests become more accurate as the flu season progresses and influenza is more prevalent in the community. As a result, rapid influenza tests and their results are good indicators of who was sick enough to be tested and who truly has the flu.

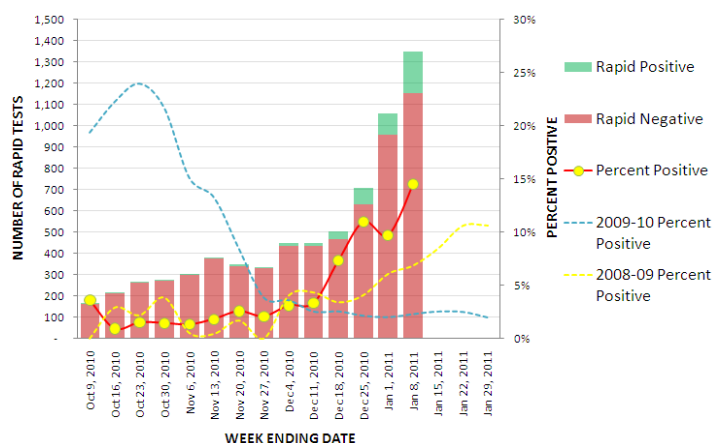


Figure 2. Number and result of rapid tests reported by clinical laboratories, 2010-11 influenza season

Type of Positives	Number (%)
Type A	405 (85%)
Type B	69 (15%)
Positive, but not typed	0
Total Positive	474 (100%)

Table 1. Number of positive rapid influenza tests, by type, reported by collaborating clinical laboratories, 2010-11 season

GET VACCINATED!

Go to

<http://dhmh.maryland.gov/swineflu/getVaccinated.html> and find your local health department for more information.

MARYLAND RESIDENT INFLUENZA TRACKING SURVEY (MRITS)

During week 1, 600 (39.5% of total) participants in the MRITS responded to the weekly survey. Of those who responded, 30 (3.3%) reported flu-like illness. This proportion is higher than this same week last season, when about 0.9% of respondents reported flu-like illness.

We are always looking for more participants for the MRITS. If you know someone who would like to participate, please direct them to our website:

<http://dhmh.maryland.gov/flusurvey>.

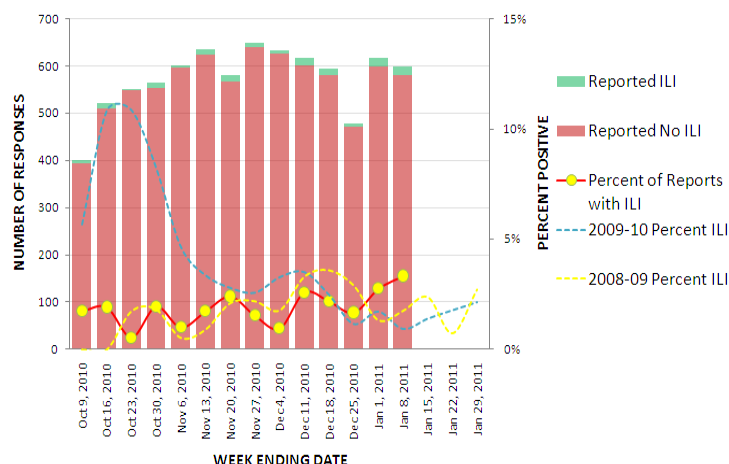


Figure 3. Number of responses and proportion reporting ILI to the MRITS by week, 2010-11 influenza season

DHMH LABORATORIES ADMINISTRATION REPORTS

During week 1, the DHMH Laboratories Administration performed a total of 129 PCR tests for influenza. Fifty-two tested positive for influenza: 24 were typed as type A (H1N1), 27 were typed as type A (H3), and one was type B.

The table to the right shows the breakdown of positive tests by influenza strain for the 2010-11 influenza season.

More information on the valuable work done by the DHMH Laboratories Administration is available at <http://dhmh.maryland.gov/labs>.

Influenza Type	No. (%)
Type A	
H1	42 (42%)
H3	53 (53%)
Unsubtyped	0 (0%)
Type B	5 (5%)
TOTAL	100 (100%)

Table 1. Number of respiratory samples positive for influenza by PCR reported by the DHMH Labs Administration, 2010-11 influenza season

EIP INFLUENZA HOSPITALIZATION SURVEILLANCE

During week 1, 41 hospitalizations associated with influenza were reported to the Emerging Infections Program (EIP). To date, there have been 157.

To be a confirmed hospitalization associated with influenza, the person must be hospitalized and have a positive influenza test of any kind (rapid test, PCR, culture).

Last season, 6 hospitalizations were reported during week 1, with a total of 1,341 at that point in the season. For the entire season (2009-10), 1,400 hospitalizations were reported.

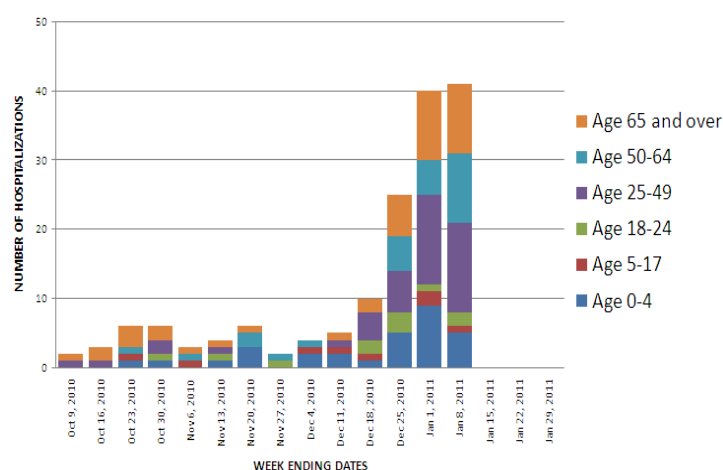


Figure 4. Number of hospitalizations associated with influenza, by age group and week, reported to the Emerging Infections Program, 2010-11 influenza season

DID YOU KNOW?

According to the [UK Press Association](http://ukpressassociation.org), 17 deaths have been associated with influenza in Scotland (pop. 5.6 million). Sixteen of them tested positive for influenza type A (H1N1). Other countries in Europe are also reporting increased influenza activity, and, unfortunately, deaths associated with influenza. If you would like to read more about how the flu is behaving in Europe, visit the WHO/Europe Influenza Surveillance program's webpage at <http://euroflu.org>.

REPORTS OF OUTBREAKS IN INSTITUTIONAL SETTINGS

During week 1, two outbreaks of influenza, one outbreak of ILI, and three outbreaks of pneumonia were reported. Last season, a total of 208 outbreaks of respiratory illness were reported. Of those, 33 were confirmed as influenza outbreaks. Institutional settings include schools, hospitals, colleges and universities, and long-term care locations. An outbreak of ILI is re-classified as an outbreak of influenza if there is laboratory evidence of influenza virus present in the samples collected from case-patients during the outbreak.

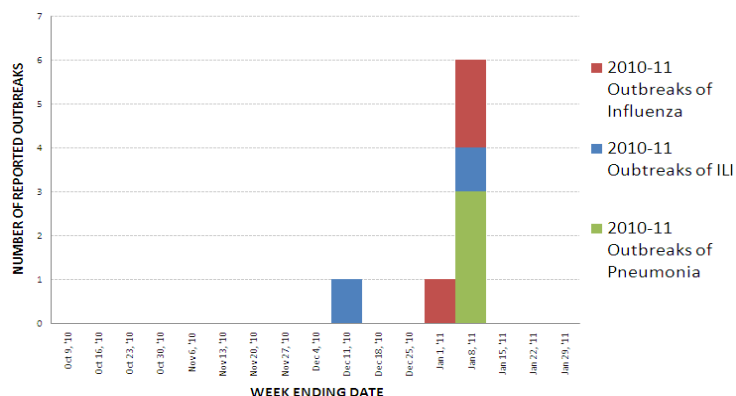


Figure 5. Number of outbreaks reported by week and by type during the 2010-11 influenza season.

EMERGENCY DEPARTMENT ILI REPORTS (ESSENCE)

During week 1, a total of 44,424 visits to emergency departments for all reasons were reported to the Office of Preparedness and Response through the ESSENCE system. Of those visits, 1,161 (2.6%) were for influenza-like illness. This proportion is slightly higher than those observed over the prior two influenza seasons.

For more information on ESSENCE, please visit the Office of Preparedness and Response's web site at: <http://bioterrorism.dhmdh.state.md.us>.

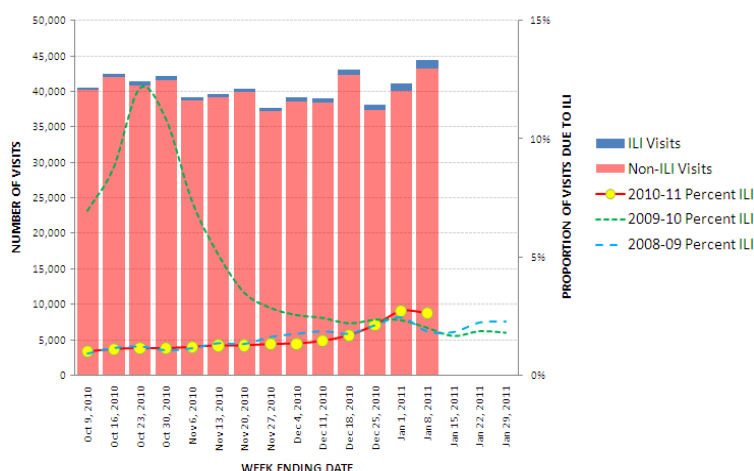


Figure 6. Number and proportion of visits to emergency departments for ILI by week reported through ESSENCE, 2010-11 influenza season.

GOOGLE FLU TRENDS

According to Google, influenza activity in Maryland is currently **"MODERATE"**. What does this mean? From the [Google Flu Trends Website](http://www.google.com/flu): "We have found a close relationship between how many people search for flu-related topics and how many people actually have flu symptoms. Of course, not every person who searches for 'flu' is actually sick, but a pattern emerges when all the flu-related search queries are added together. We compared our query counts with traditional flu surveillance systems and found that many search queries tend to be popular exactly when flu season is happening. By counting how often we see these search queries, we can estimate how much flu is circulating in different countries and regions around the world."

DID YOU KNOW?

What to do if you get sick with influenza? [According to CDC](http://www.cdc.gov), if you get sick, you should stay home to keep the flu from spreading. However, if you have are at high risk for complications (like folks with lung conditions, diabetes, are pregnant, over the age of 65, or a young child), you should talk to a health care provider about being evaluated to

United States > Maryland

2010-2011 2009-2010

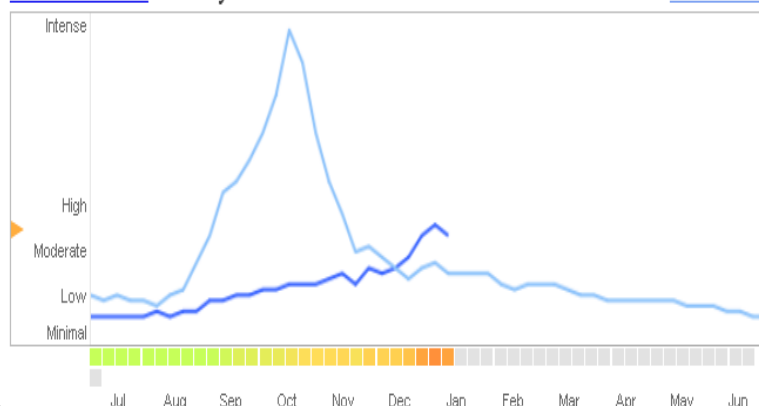


Figure 7 – According to Google Flu Trends, influenza activity in Maryland is currently "moderate". At this time last year, during the 2009 H1N1 influenza pandemic, influenza activity in Maryland was "low" to "moderate".

OFFICE OF INFECTIOUS DISEASE
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VISIT US ON THE WEB:

<http://dhmh.maryland.gov>

**ALL THE INFORMATION INCLUDED
IN THIS REPORT IS PROVISIONAL
AND SUBJECT TO CHANGE AS MORE
DATA ARE RECEIVED FROM
SURVEILLANCE SOURCES.**

**THE INFORMATION INCLUDED IN
THIS REPORT IS NOT INTENDED TO
BE USED FOR INDIVIDUAL
DIAGNOSES.**

ONLINE VERSION OF THIS REPORT
AND PAST SEASONS' REPORTS MAY
BE DOWNLOADED AT:

<http://dhmh.maryland.gov/fluwatch>

FLU SURVEILLANCE IN NEIGHBORING
STATES:

DELAWARE-

<HTTP://BIT.LY/9Zkp3>

DC-

<http://tinyurl.com/yj7br9e>

PENNSYLVANIA-

<http://tinyurl.com/37323xn>

VIRGINIA-

<http://tinyurl.com/kmnaeu>

WEST VIRGINIA-

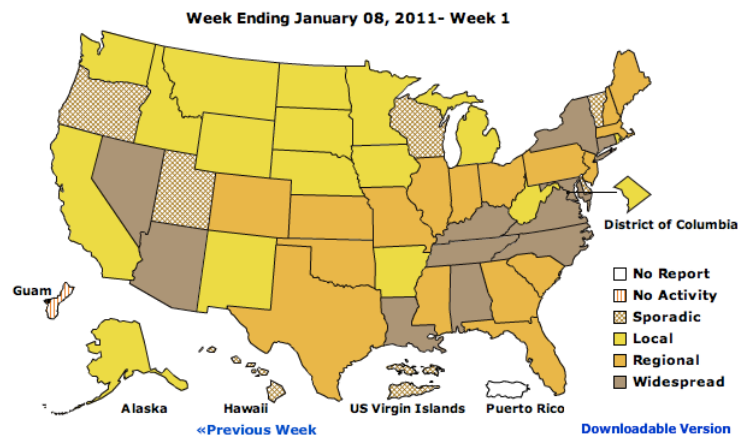
<http://tinyurl.com/39m2kon>

CDC NATIONAL INFLUENZA SURVEILLANCE REPORT

(<http://cdc.gov/flu/weekly>)

During week 1 (January 2-8, 2011), influenza activity in the United States decreased in several indicators, but it is unlikely that influenza activity for this season has peaked.

- Of the 4,331 specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division, 706 (16.3%) were positive for influenza.
- The proportion of deaths attributed to pneumonia and influenza (P&I) was at the epidemic threshold.
- Four influenza-associated pediatric deaths were reported. Two of these deaths were associated with influenza A (H3) viruses and two were associated with influenza B virus infection.
- The proportion of outpatient visits for influenza-like illness (ILI) was 2.2%, which is below the national baseline of 2.5%. One of the 10 regions (Region 4) reported ILI above region-specific baseline levels. Four states experienced high ILI activity, New York City experienced moderate ILI activity, four states experienced low ILI activity, 42 states experienced minimal ILI activity, and data were insufficient from the District of Columbia.
- The geographic spread of influenza in 11 states was reported as widespread; 17 states reported regional influenza activity; the District of Columbia and 16 states reported local influenza activity; the U.S. Virgin Islands, and six states reported sporadic influenza activity, and Guam reported no influenza activity.



*This map indicates geographic spread and does not measure the severity of influenza activity.

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILInet
2010-11 Influenza Season Week 1 ending Jan 08, 2011

